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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/940,210      | 08/28/2001  | Sang Min Lee         | DMJ002              | 4969             |

7590 05/21/2003

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EXAMINER

NGUYEN, FRANCIS N

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2674

DATE MAILED: 05/21/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

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## Office Action Summary

Application No.

09/940,210

Applicant(s)

LEE, SANG MIN

Examiner

FRANCIS NGUYEN

Art Unit

2674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) NONE is/are allowed.
- 6) ☒ Claim(s) 1,3-7,9-13 and 15-18 is/are rejected.
- 7) ☐ Claim(s) 2,8 and 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Objections*

1. Claims 4, 10, 16 are objected to because of the following informalities: incorrect word "Crystals" in claim 4( page 4, line 5), claim 10( page 13, line 16), claim 16 ( page 14, line 29).

Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3-7, 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Genest et al. ( US Patent 6,480,377) in view of Price et al. ( US Patent 6,377,444).

As to claim 1, Genesis et al. teaches a handheld computerized device ( handheld computer 12 shown in figure 1, column 7, lines 50-54) comprising:

a keyboard portion having a support base and a keypad ( keyboard 20 and support base shown in figure 1, column 7, lines 34-36, plurality of individual keys 58 shown in figure 3),  
an electronic housing having a configuration defined by a top surface, a bottom surface, a rear edge, a front edge, and a pair of side edges, the front edge of the electronic housing being hingedly coupled to the front edge of the support base ( housing of handheld computer 12 shown in figure 1, hinge structure 17, column 7, lines 15-16)

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a pair of hand support means ( latch hook 60 and hook receiving member 62, column 14, lines 28-32)

a means for displaying data ( screen 32, column 8, lines 12-14)

a processor situated within the electronic housing ( computer processor 30, column 8, lines 1-3)

However, Genest et al. fails to teach electronic housing pivot from a closed position into an open position wherein the bottom surface of the electronic housing is parallel to the bottom surface of the support base. Price et al. teaches hinged housings for electronic devices ( see abstract), with first body portion and second body portion for rotation at an angle greater than 180 degrees from the mounting surface ( column 3, lines 15-18) . It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize the apparatus of Genest et al. then modify the electronic housing to pivot from a closed position to an open position for more than 180 degrees as taught by Price et al. to obtain the apparatus Genest et al. modified by Price et al. because it would allow user to have multiple configurations , as taught by Price et al. ( column 5, lines 35-36).

As to claim 3, the device recited in claim 1, wherein the display means further comprises: a display area defined by a top edge, bottom edge, and a pair of side edges ( Genest et al., screen 32, column 8, lines 3-4) ; a front panel surrounding the display area and being defined by a top strip, a bottom strip, and a pair of side strips; and each edge of the display lying adjacent to and being securely attached to each corresponding strip of the display area ( inherent on front side 26 shown on figure 1, for supporting LCD screen 32).

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As to claim 4, the device recited in claim 3 wherein the display area is a Liquid Crystal Display ( Genest et al., column 8, lines 13-14).

As to claim 5, the device recited in claim 3, wherein the bottom strip and each side strip of the front panel further comprises a plurality of additional alphanumeric keys ( Genest et al., keys 58 and switches 56, column 11, lines 7-8) each adapted to generate a character signal upon depression thereof; and a means for electrically connecting the plurality of additional alphanumeric keys to the processor whereby each generated character signal is transmitted to the processor ( data port and data connector, column 11, lines 13-15) .

As to claim 6, the device recited in claim 1, further comprising a pressure sensitive writing means for allowing data to be inputted via handwriting ( Genest et al., column 8, lines 15-17 column 11, lines 58-64).

As to claim 7, Genesis et al. teaches a handheld computerized device ( handheld computer 12 shown in figure 1, column 7, lines 50-54) comprising:

a keyboard portion having a support base and a keypad ( keyboard 20 and support base shown in figure 1, column 7, lines 34-36) plurality of individual keys 58 shown in figure 3),

an electronic housing having a configuration defined by a top surface, a bottom surface, a rear edge, a front edge, and a pair of side edges ( housing of handheld computer 12 shown in figure 1)

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a pair of hand support means ( latch hook 60 and hook receiving member 62, column 14, lines 28-32)

a means for displaying data ( screen 32, column 8, lines 12-14)

a processor situated within the electronic housing ( computer processor 30, column 8, lines 1-3)

However, Genest et al. fails to teach bottom surface of the electronic housing being securedly attached to the bottom surface of the keyboard portion . Note that Genest et al. does teach a hinge structure 17 ( column 7, lines 15-16); this would allow pivoting. It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize the apparatus of Genest et al. then make use of the hinge for pivoting resulting in bottom surface of the electronic housing attached to the bottom surface of the keyboard portion to obtain the apparatus Genest et al. modified because it would allow different configurations for user.

As to claim 9, the device recited in claim 7, wherein the display means further comprises: a display area defined by a top edge, bottom edge, and a pair of side edges ( Genest et al., screen 32, column 8, lines 3-4) ; a front panel surrounding the display area and being defined by a top strip, a bottom strip, and a pair of side strips; and each edge of the display lying adjacent to and being securely attached to each corresponding strip of the display area ( inherent on front side 26 shown on figure 1, for supporting LCD screen 32).

As to claim 10, the device recited in claim 7 wherein the display area is a Liquid Crystal Display ( Genest et al., column 8, lines 13-14).

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As to claim 11, the device recited in claim 9, wherein the bottom strip and each side strip of the front panel further comprises a plurality of additional alphanumeric keys ( Genest et al., keys 58 and switches 56, column 11, lines 7-8) each adapted to generate a character signal upon depression thereof; and a means for electrically connecting the plurality of additional alphanumeric keys to the processor whereby each generated character signal is transmitted to the processor ( data port and data connector, column 11, lines 13-15) .

As to claim 12, the device recited in claim 7, further comprising a pressure sensitive writing means for allowing data to be inputted via handwriting ( Genest et al., column 8, lines 15-17 column 11, lines 58-64).

Claims 13, 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Genest et al. ( US Patent 6,480,377) in view of Allgeyer et al. ( US Patent 6,477,042)

As to claim 13, Genesis et al. teaches a handheld computerized device ( handheld computer 12 shown in figure 1, column 7, lines 50-54) comprising:

a keyboard portion having a support base and a keypad ( keyboard 20 and support base shown in figure 1, column 7, lines 34-36) plurality of individual keys 58 shown in figure 3),

an electronic housing having a configuration defined by a top surface, a bottom surface, a rear edge, a front edge, and a pair of side edges ( housing of handheld computer 12 shown in figure 1)

a pair of hand support means ( latch hook 60 and hook receiving member 62, column 14, lines 28-32)

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a means for displaying data ( screen 32, column 8, lines 12-14)

a processor situated within the electronic housing ( computer processor 30, column 8, lines 1-3)

However, Genest et al. fails to teach sliding brackets having a pair of guide members. Allgeyer et al. teaches a sliding bracket with rails ( column 11, lines 55-57). It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize the apparatus of Genest et al. then make use of sliding brackets with guide members as taught by Allgeyer to obtain the apparatus Genest et al. modified by Allgeyer et al. because it would allow ease of assembling/disassembling , as taught by Allgeyer ( column 11, lines 56-57) and also user can easily change configuration.

As to claim 15, the device recited in claim 13, wherein the display means further comprises: a display area defined by a top edge, bottom edge, and a pair of side edges ( Genest et al., screen 32, column 8, lines 3-4) ; a front panel surrounding the display area and being defined by a top strip, a bottom strip, and a pair of side strips; and each edge of the display lying adjacent to and being securely attached to each corresponding strip of the display area ( inherent on front side 26 shown on figure 1, for supporting LCD screen 32).

As to claim 16, the device recited in claim 15 wherein the display area is a Liquid Crystal Display ( Genest et al., column 8, lines 13-14).

As to claim 17, the device recited in claim 15, wherein the bottom strip and each side strip of the front panel further comprises a plurality of additional alphanumeric keys ( Genest et al., keys



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58 and switches 56, column 11, lines 7-8) each adapted to generate a character signal upon depression thereof; and a means for electrically connecting the plurality of additional alphanumeric keys to the processor whereby each generated character signal is transmitted to the processor ( data port and data connector, column 11, lines 13-15) .

As to claim 18, the device recited in claim 13, further comprising a pressure sensitive writing means for allowing data to be inputted via handwriting ( Genest et al., column 8, lines 15-17 column 11, lines 58-64).

*Allowable Subject Matter*

4. Claims 2, 8 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: As to claims 2, 8 and 14, none of prior art teaches the first section of a keypad arranged in the standard QWERTY keyboard for the left hand, the second section of the keypad being arranged in the standard QWERTY keyboard format for the right hand.

CONCLUSION

5. The prior art made of record not relied upon is pertinent to applicant's disclosure

|           |       |           |
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| US Patent | Susel | 6,111,527 |
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|           |       |           |
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| US Patent | Tzeng | 6,431,776 |
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Reference Susel is made of record as it discloses keyboard assembly for handheld and subnotebook comprising a primary keyboard and an auxiliary keyboard.

Reference Tzeng is made of record as it discloses a compact keyboard.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **FRANCIS N NGUYEN** whose telephone number is **703 308-8858**. The examiner can normally be reached during hours 8:00 AM- 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **RICHARD A HJERPE** can be reached at 703 305-4079.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

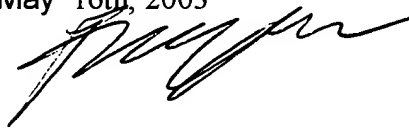
**or faxed to:**

**(703) 872-9314 ( for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor ( Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service whose telephone number is (703) 306-0377.

May 16th, 2003



FRANCIS N NGUYEN  
Examiner  
Art Unit 2674